

Response of June 17, 2005

**U.S. Patent Application 09/857,906
Atty Docket No. QMT1.1-US**

Listing of the Claims:

- 1-8. (canceled)
9. (new) An intrinsically antimicrobial material comprising:
- an absorbent polymeric matrix having an enhanced surface area;
- wherein said enhanced surface area further comprises a polymer of antimicrobial monomeric moieties attached to said matrix via non-siloxane covalent chemical bonds so as to render the polymer non-leachable upon exposure to acids or bases produced during bacterial growth and to leave the material antimicrobial after exposure of the material to skin or aqueous biological fluids.
10. (new) The material of claim 9, wherein said aqueous biological fluids are bodily fluids, sweat, tears, mucus, urine, menses, blood, wound exudates, or mixtures thereof.
11. (new) The material of claim 9, wherein molecules of said polymer are attached to said matrix via one or more covalent carbon-oxygen-carbon bonds, or carbon-carbon bonds, or carbon-nitrogen bonds, or combinations thereof.
12. (new) The material of claim 9, wherein said antimicrobial monomeric moieties are allyl- or vinyl-containing monomers.
13. (new) The material of claim 9, wherein said antimicrobial monomeric moieties comprise at least one quaternary ammonium compound.
14. (new) The method of claim 13, wherein the quaternary ammonium compound is dimethyldiallyl ammonium chloride, or a trialkyl(p-vinylbenzyl)ammonium chloride, or a p-trialkylaminoethyl styrene monomer.
15. (new) The material of claim 9, wherein said matrix comprises cellulose.

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16. (new) The material of claim 9, wherein said matrix comprises a polyethylene oxide, a polyvinyl alcohol, or a polyacrylate.
17. (new) The material of claim 9, wherein said matrix consists essentially of hydrophilic fibers or filaments having a superabsorbent capacity for aqueous biological fluids as evidenced by being capable of absorbing at least about thirty times its own weight of water.
18. (new) An absorbent dressing, diaper, sanitary pad, or tampon comprising the intrinsically antimicrobial material of claim 9.
19. (new) A method for fabricating the intrinsically antimicrobial material of claim 9 comprising the steps of:

forming an absorbent polymeric matrix having an enhanced surface area; and

attaching a polymer of antimicrobial monomeric moieties in an amount sufficient to impart to the material an antimicrobial effect which remains after exposure of the material to skin or aqueous biological fluids.
20. (new) The method of claim 19, wherein said antimicrobial monomeric moieties comprise at least one quaternary ammonium compound.
21. (new) The method of claim 20, wherein the quaternary ammonium compound is dimethyldiallyl ammonium chloride, or a trialkyl(p-vinylbenzyl)ammonium chloride, or a p-trialkylaminoethyl styrene monomer.